slots formed in the electromagnetic rotor, each layer being substantially entirely coated with a powder resin having a dielectric strength of at least 1000 v/mil, and a thermal stability above 155° C.

electromagnetic rotor comprising multiple layers, said layers each having a pair of ends connected by a pair of longitudinal sides that are adapted to be received within elongated slots formed in the electromagnetic rotor, each layer being substantially entirely coated with a powder resin selected from a group consisting essentially of epoxy powder resins and silicone powder resins, wherein said powder resin has a dielectric strength of at least 1000 v/mil and thermal stability above 155° C.

(Amended) A current carrying copper field coil for a generator electromagnetic rotor comprising helically wound layers, each having a pair of ends connected by a pair of longitudinal sides that are adapted to be received within elongated slots formed in the electromagnetic rotor, each layer being substantially entirely coated with insulation comprising a powder resin having a dielectric strength of at least 1000 v/mil, and a thermal stability about 155° C.